ABSTRACT

A stent-graft fabricated from a thin-walled, high strength material provides for a more durable and lower profile endoprosthesis. The stent-graft comprises one or more stent segments covered with a fabric formed by the weaving, knitting or braiding of a biocompatible, high tensile strength, abrasion resistant, highly durable yarn such as ultra high molecular weight polyethylene. The one or more stent segments may be balloon expandable or self-expanding. The fabric may be attached to the stent segments utilizing any number of known materials and techniques. The fabric may be attached to the stent segments utilizing an attachment device that secures the fabric to a strut of the stent segment by sandwiching the fabric between itself and the stent strut.